FACT SHEET

United States Department of Agriculture • Office of Communications • 1400 Independence Avenue, SW
Washington,DC 20250-1300 • Voice:(202) 720-4623 • Email: OC.NEWS@usda.gov • Web: www.USDA.gov

Fact Sheet

Release No. fs-0194.03

June 6, 2003

USDA Targeted Incentives for Greenhouse Gas Sequestration

"We will look for ways to increase the amount of carbon stored by America's farms and forests through a strong conservation title in the farm bill. I have asked Secretary Veneman to recommend new targeted incentives for landowners to increase carbon storage."

-- President George W. Bush, February 14, 2002

USDA is taking a series of actions to respond to the request laid out by President Bush in February 2002. USDA will provide incentives and support voluntary actions by private landowners, including farmers and forest and grazing landowners.

USDA will give consideration to management practices that store carbon and reduce greenhouse gases in setting priorities and implementing forest and agriculture conservation programs. The actions USDA will implement include financial incentives, technical assistance, demonstrations, pilot programs, education and capacity building, along with measurements to assess the success of these efforts.

In FY 2004, USDA will invest almost $3.9 billion in agriculture and forest conservation, an increase of $1.7 billion over FY 2001 levels. Due to the increase in conservation investments and a focus that includes carbon sequestration efforts, USDA estimates these actions will reduce greenhouse gas emissions and sequester roughly 12 million tons of greenhouse gases (measured in carbon equivalent terms) annually by 2012.

Forests, crop and grazing land conservation actions can play a unique role in reducing the greenhouse gas intensity of the U.S. economy. Given the size and productivity of the U.S. land base, these practices have a distinct comparative advantage relative to many other domestic options.

Significant environmental benefits will result from efforts to sequester carbon in forest systems. Forest management helps to maintain desirable water quality, helps to prevent or lessen flooding, provides for healthy aquatic communities and supports in-stream uses and downstream withdrawals. A managed forest landscape can enhance wildlife diversity and abundance. Establishing forests on marginal, poor, or degraded agricultural lands can enhance soil carbon storage and nutrient retention capacity, significantly reduce soil erosion, improve wildlife habitat and water quality and provide increased recreation opportunities and landowner income.

Most U.S. cropland soils have lost at least one-third and some up to 60 percent of their carbon since they were first converted to crop production beginning about 200 years ago. This diminished carbon pool can, however, be replenished by changes in land use and land management. Conversion back into forests, grasslands or wetlands, which occurs on lands enrolled in such USDA programs as the Conservation Reserve Program (CRP), Conservation Reserve Enhancement Program (CREP) and Wetlands Reserve Program (WRP), fosters the re-accumulation of carbon in soils.

However, cropland does not need to be taken out of production to sequester carbon. Land management practices such as conservation tillage (e.g., reduced or no till), residue management, cover cropping, increasing crop frequency, nutrient and water management and erosion control can increase soil carbon content while the land is still used for crop production. These practices also help preserve cropland and improve long-term productivity.

Crop and grazing lands can also be a source of nitrous oxide (N_2O) and methane (CH_4) emissions from nitrogen fertilizers

and manure. Actions such as manure management, the use of anaerobic digesters and improving fertilizer and fuel efficiency can significantly reduce greenhouse gas emissions.
Major elements of the USDA actions to reduce greenhouse gases are as follows:
Environmental Quality Incentives Program (EQIP): The Natural Resources Conservation Service (NRCS) delivered guidance to its state offices to reward and recognize actions that reduce greenhouse gas emissions within the EQIP ranking systems. By including this ranking criterion, NRCS can provide cost-share assistance to livestock producers to install greenhouse gas mitigating technologies, including construction of methane digesters. Producers who improve the quality of their nutrient management systems by achieving a higher level of nitrogen use efficiency can also receive cost-share funds.
Forest Land Enhancement Program (FLEP): The Forest Service will promote additional carbon sequestration, improve wildlife habitat, improve soil and water quality and promote sustainable forest management through the Forest Land Enhancement Program (FLEP). Eligible FLEP activities that provide carbon sequestration benefits include afforestation, reforestation, forest stand improvements, agro-forestry, windbreaks and riparian forest buffers.
Conservation Reserve Program (CRP): The Farm Service Agency has issued a new rule for implementing the Conservation Reserve Program. FSA also enrolls certain highly environmentally sensitive acreage in the CRP on a continuous basis. The agency recently announced it will target 500,000 acres of continuous signup enrollment toward hardwood tree planting beginning in summer 2003, which USDA expects will sequester one million tons of carbon in 2012.
Greenhouse Gas Pilot Projects: USDA will pursue projects in collaboration with private partners to test forest and agriculture greenhouse gas sequestration and mitigation technologies and practices. Potential partners include locally-led groups such as Resource Conservation and Development Councils, private companies, conservation groups and farm cooperatives.
Greenhouse Gas Accounting Protocols: In February 2002, the President directed USDA to develop new accounting rules and guidelines for reporting greenhouse gas emissions. USDA is working closely with the Department of Energy, Department of Commerce and the Environmental Protection Agency to establish new accounting rules and guidelines for reporting greenhouse gas emissions. The new accounting rules will improve the voluntary greenhouse gas registry (1605b) and are on schedule to be delivered in January 2004.
Biomass Energy: USDA is making available approximately $44 million in grants that will support the President 's energy plan and expand the economic and environmental promise of biomass energy. Twenty-three million dollars of this will be available from USDA Rural Development for the Renewable Energy Systems and Energy Efficiency Improvements program to assist landowners and small businesses develop renewable energy systems and make energy efficiency improvements. Through the Biomass Research and Development Initiative, $21 million in grants are available to carry out research, development and demonstration of biomass energy, bio-based products, bio-fuels and bio-power.

Estimated Greenhouse Gas Reductions from USDA Targeted Incentives With quantified benefits[1]

Action	Estimated Greenhouse Gas Emission Reduction in 2012 (MMTCE)[2]
Revise the Environmental Quality Incentives Program (EQIP) Ranking Criteria to include greenhouse gas emission reductions	7.1
On-farm energy generation and greenhouse gas reduction from livestock waste management	2.3
Improved nitrogen application practices in agricultural cropping systems	1
Greenhouse gas management pilot projects	0.5
Forest Land Enhancement Program (FLEP)	0.4
Revise the Conservation Reserve Program Environmental Benefits Index to include carbon sequestration	0.1
Include 500,000 acres of hardwoods in the Conservation Reserve Program	1.0
Total	12.4